

This letter is written in response to your request for comments on the proposed goals, standards, and questions broached in the document entitled "Standards for Living Organisms in Ship's Ballast Water Discharged in U.S. Waters" (33 CFR Part 151). The following comments are in regard to the possible goals and standards set out in the document.

In making a decision as to the overall goal for ballast water and what standards should be in place to protect domestic waters, health impacts as well as environmental impacts should be considered. Specifically, the proposed goal and set standards, in addition to providing environmental protection, should provide adequate human health protection when exposed to ballast release waters that may contain enteric pathogens. Human exposure could occur through recreational use (bathing beaches etc.) or through drinking water use.

The goals G1 and G2 both attempt to provide levels of protection from adverse environmental or health-related effects by minimizing the impact on the receiving waters. In our opinion, in terms of minimizing health and environmental impacts, G2 (treating water to drinking water standards) would provide the highest protection but may not be economically, or realistically feasible or necessary. G1, on the other hand, will still provide source water protection, but may be more realistic. The requirement of G3 to have ballast water treatment technology as effective as ballast water exchange may not provide health and environmental protection since the effectiveness of ballast water exchange is not known.

In reviewing the proposed standards, two of the standards (S1 and S2) do not include treatment to the level of microorganisms (<100 microns). This may potentially allow the release of harmful microorganisms, including enteric pathogens, into domestic waters causing adverse environmental and health effects. Standards S3 and S4 both include a certain measure of protection from microorganisms in addition to dealing with larger nuisance organisms. Standards such as S3 and S4 that include treatment of organisms from micro to macro will provide better protection from health and environmental hazards. It should be noted that although a proposed treatment goal was water treated to drinking water standards, this goal is not reflected in any of the proposed standards.

When finalizing the goals and standards for the release of ballast water, it is our hope that both environmental impacts and possible human health impacts will be taken into consideration.